



UNITED STATES PATENT AND TRADEMARK OFFICE

A

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/620,222	07/15/2003	Makoto Takamura	WAKA 20.515	8516
47888	7590	02/24/2006	EXAMINER	
HEDMAN & COSTIGAN P.C. 1185 AVENUE OF THE AMERICAS NEW YORK, NY 10036			SANTIAGO, MARICELI	
			ART UNIT	PAPER NUMBER
			2879	

DATE MAILED: 02/24/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/620,222	TAKAMURA, MAKOTO	
	Examiner	Art Unit	
	Mariceli Santiago	2879	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 30 November 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) 5-10 is/are withdrawn from consideration.
- 5) ☒ Claim(s) 3 and 4 is/are allowed.
- 6) ☒ Claim(s) 1 and 2 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 15 July 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Amendment

The Amendment, filed on November 30, 2005, has been entered and acknowledged by the Examiner.

Claims 1-10 are pending in the instant application.

Election/Restrictions

Applicant's election of Group I, claims 1-4, in the reply filed on November 30, 2005 is acknowledged. Because applicant did not distinctly and specifically point out the supposed errors in the restriction requirement, the election has been treated as an election without traverse (MPEP § 818.03(a)). Claims 5-10 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected invention, there being no allowable generic or linking claim.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 1 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 1 recites "bonding seal caps having a transparent top and an electronic circuit arranged on top of said transparent top so as to seal each of said electroluminescent elements", the recitation is unclear since it fails to indicate to which element the seal caps are bonded, in

Art Unit: 2879

order to "seal each of said electroluminescent elements", i.e., the substrate or the electroluminescent elements itself.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 1 is rejected under 35 U.S.C. 103(a) as being unpatentable over Ota et al. (JP 2000243555) in view of Otake et al. (US 6,424,092), and further in view of Rogers et al. (US 6,080,031).

Regarding claim 1, Ota discloses a method of manufacturing an organic electroluminescent display element, comprising the steps of forming an organic electroluminescent element on top of a transparent substrate, bonding a seal cap having a top and an electronic circuit arranged on top of the seal cap to the transparent substrate, so as to seal the electroluminescent element. Ota fails to disclose the limitation of the seal cap being transparent. In the same field of invention, Otake discloses a method of manufacturing an organic electroluminescent display element comprising the step of bonding a seal cap provided with an electronic circuit to a transparent substrate, the seal cap selected from a material having an excellent sealing property such as aluminum, iron plate or glass. It is understood that the aluminum and iron plate are opaque/dark materials while glass materials are transparent, accordingly, Otake discloses the used of any of these material art recognized equivalents in the field of seal caps. Thus, it would have been obvious to one of ordinary skills in the art at the time

Art Unit: 2879

the invention was made to use glass instead of metal, since the selection of any of these known equivalents would be are considered within the level of ordinary skill in the art.

The combined references to Ota-Odake fails to disclose the limitation of providing a plurality of electroluminescent elements on top of a substrate, providing a plurality of seal caps for each electroluminescent element so as to seal the electroluminescent elements, and then cutting the transparent substrate around each of the organic electroluminescent elements to form organic electroluminescent display elements. However, in the same field of endeavor, Rogers discloses a method of manufacturing organic electroluminescent display elements comprising the steps of forming a plurality of electroluminescent elements on top of a substrate, providing and bonding a plurality of seal caps for each electroluminescent element to seal each electroluminescent elements and then cutting the transparent substrate around each of the organic electroluminescent elements to form organic electroluminescent display elements. The disclosed method of manufacturing facilitates the substantially simultaneous encapsulation of multiple electroluminescent devices, thus, providing for the fast and consistent mass production of electroluminescent devices. Thus, it would have been obvious at the time the invention was made to a person having ordinary skills in the art to incorporate manufacturing assembly disclosed by Rogers in the method of Ota-Odake in order to provide for a fast and consistent mass production of electroluminescent devices.

Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Ota et al. (JP 2000243555) in view of Odake et al. (US 6,424,092), in view of Rogers et al. (US 6,080,031), and further in view of Onitsuka et al. (US 6,049,167)

Regarding claim 2, the combined references Ota-Odake-Rogers disclose a method wherein an UV curing resin seal (epoxy) is used in the bonding of the seal caps, and the seal

caps made of transparent glass, thus transparent to UV light, however, they are silent in regards to the limitation of the bonding of the seal caps to the UV curing resin seal is carried out by shining UV light on the UV curing resin seal from the seal cap side. In the same field of endeavor, Onitsuka discloses a method wherein an UV curing resin seal (epoxy) is used in the bonding of the seal caps, seal glass transparent to UV light is used in the seal caps, and the bonding of the seal caps to the UV curing resin seal is carried out by shining UV light on the UV curing resin seal from the seal cap side in order to provide a sealing technique that does not require heat, thus avoiding the glass components of the display to reach glass transition temperatures that will damage the OLED display structure. Thus, it would have been obvious at the time the invention was made to a person having ordinary skills in the art to incorporate the UV curing technique disclosed by Onitsuka in the method of Ota-Odake-Rogers in order to provide a sealing technique that does not require heat, thus avoiding the glass components of the display to reach glass transition temperatures that will damage the OLED display structure.

Allowable Subject Matter

Claims 3 and 4 are allowed over the prior art of record.

The following is a statement of reasons for the indication of allowable subject matter:

Regarding claims 3 and 4, the references of the Prior Art of record fails to teach or suggest the combination of the limitations as set forth in claim 3, and specifically comprising the limitation of an ultraviolet curing resin seal having anisotropic conductive particles mixed therein is used in the bonding of the seal caps to the transparent substrate, and ultraviolet light is shone on the ultraviolet curing resin seal after the seal caps and the transparent substrate are compressed so that the anisotropic conductive particles have a compressibility of 10 - 50%.

Response to Arguments

Applicant's arguments with respect to claims 1 and 2 have been considered but are moot in view of the new ground(s) of rejection.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Contact Information

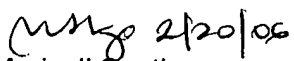
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mariceli Santiago whose telephone number is (571) 272-2464. The examiner can normally be reached on Monday-Friday from 9:30 AM to 6:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nimesh Patel, can be reached on (571) 272-2457. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications

Art Unit: 2879

may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Mariceli Santiago
Primary Examiner
Art Unit 2879